#### CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO, CA 95814-5512 www.energy.ca.gov



#### NOTICE OF PROPOSED AWARDS (NOPA)

# Improving Performance and Cost Effectiveness of Wind Energy Technologies GFO-16-310 September 13, 2017

On April 6, 2017, the California Energy Commission (Energy Commission) released a competitive solicitation to fund applied research and development projects that develop technologies, tools, and strategies that reduce technological and economic barriers to upgrading, repowering, and expanding wind power generation and enable higher wind energy contribution to the in-state electricity mix. Up to \$2.5 million in Electric Program Investment Charge (EPIC) funding is available to fund applications in this competitive solicitation.

The Energy Commission received nineteen proposals by the due date of June 20, 2017. Each proposal was screened, reviewed, evaluated and scored using the criteria in the solicitation. All nineteen proposals passed the Stage One Application Screening.

The attached table titled "Notice of Proposed Awards" identifies each applicant selected and recommended for funding by Energy Commission staff and includes the recommended funding amount and score. The total amount recommended is \$1,249,982.

Funding of the proposed project resulting from this solicitation is contingent upon the approval of the project at a publicly noticed Energy Commission Business Meeting and execution of a grant agreement. If the Energy Commission is unable to timely negotiate and execute a funding agreement with an Applicant, the Energy Commission, at its sole discretion, reserves the right to cancel or otherwise modify the pending award.

In addition, the Energy Commission reserves the right to: 1) add to, remove, or shift funding to make additional awards and 2) negotiate with successful applicants to modify the project scope, schedule, and/or level of funding.

This notice is being mailed to all parties who submitted an application to this solicitation and is also posted on the Energy Commission's website at: <a href="https://www.energy.ca.gov/contracts/">www.energy.ca.gov/contracts/</a>.

For information, please contact Gordon Kashiwagi at (916) 654-5131 or gordon.kashiwagi@energy.ca.gov.

Gordon Kashiwagi Commission Agreement Office



### California Energy Commission GFO-16-310

## Improving Performance and Cost Effectiveness of Wind Energy Technologies Notice of Proposed Awards September 13, 2017

Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
Proposed Awa	rd						
1	RCAM Technologies	High Performance, Ultra-Tall, Low Cost Concrete Wind Turbine Towers Additively Manufactured On-Site	\$1,249,982	\$1,249,982	\$30,000	82.15	Awardee
	Total			\$1,249,982	\$30,000		
Did Not Pass							
	San Diego State University Research Foundation	Flexible Blade for Small- and Medium-sized Horizontal Axis Wind Turbine	\$1,249,861	\$0	\$404,345		Did Not Pass
	Portland State University	Design and Testing of a Magnetically geared Turbine Drivetrain	\$1,249,500	\$0	\$376,634		Did Not Pass
	Regents of the University of California, Los Angeles	Low-Cost Biplane Blade Design for Cost-Effective Wind Energy	\$1,249,645	\$0	\$0		Did Not Pass
	Sandia National Laboratories	Aero-MINE (Motionless, INtegrated, Energy) for Distributed, Scalable Wind Power	\$1,249,722	\$0	\$865,825		Did Not Pass
	Wind Harvest International	Researching and Developing the Potential of VAWTs to Double Capacities of California's Wind Resource Regions While Preventing Harm to Birds-Phase I	\$1,248,644	\$0	\$298,008		Did Not Pass
	AirLoom Energy, A DBA of KiteFarms LLC	AirLoom: Overcoming Commercialization Hurdles for a Radically Inexpensive, Utility-Scale Wind Energy Device	\$1,248,634	\$0	\$746,261		Did Not Pass
	University Enterprises, Inc. on behalf of CSU Sacramento	Modular and Scalable Development and Integration of Hybrid Wind-Solar-Storage for Customer and Grid Support under Large Penetration of Wind and Solar Systems in California's Grid	\$1,143,608	\$0	\$94,765		Did Not Pass



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	The Regents of the University of California, Los Angeles	Lab-based Demonstration of Wind Energy Management System	\$1,239,737	\$0	\$300,000		Did Not Pass
	Bergey Windpower Company LLC	Advanced Small Wind Turbine Field Demonstration Program	\$1,250,000	\$0	\$360,719		Did Not Pass
	SLAC National Accelerator Laboratory	Powerflex	\$1,250,000	\$0	\$65,000		Did Not Pass
	Board of Trustees of the Leland Stanford Junior University (SLAC National Accelerator Laboratory)	Cost-effective Repowering of California Wind Farms with Vertical Axis Wind Turbines (VAWT): Fullscale	\$1,094,882	\$0	\$207,163		Did Not Pass
	California State University, Long Beach Research Foundation	Pilot Scale and Field Demontration of a High Efficiency Vertical Axis Wind Farm	\$651,405	\$0	\$50,396		Did Not Pass
	California State University, Northridge	Reducing Cost of Energy: Multidisciplinary Approach Using Smart Materials and Grid Connected Urban Wind Turbines	\$1,076,124	\$0	\$0		Did Not Pass
	AWE Industries,LLC	Atmospheric Wind Extractor: A Revolutionary Wind Energy Development Project (AWE)	\$1,247,313	\$0	\$4,112,350		Did Not Pass
	Primo Wind, Inc.	Development and Demonstration of a Novel Efficient and Cost Effective Small and Distributed Wind Energy Technology	\$590,212	\$0	\$0		Did Not Pass
	Alaska Applied Sciences, LLC	Low-cost Wind-source Hydrogen Transportation Fuel from Old and New California Windplants	\$500,000	\$0	\$93,000		Did Not Pass
	H2B2 USA LLC	H2Wind	\$1,249,315	\$0	\$0		Did Not Pass



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Rank Number	Project Applicant	Title	Energy Commission Funds Requested	Energy Commission Funds Recommended	Match Funds	Score	Award Status
	Brent Lee	Windmill Power Generation System Amplified by Rotary Jet	\$1,250,000	\$0	\$100,000		Did Not Pass
	Total			\$0	\$8,074,466		
Grand Total			\$21,288,584	\$1,249,982	\$8,104,466		